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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,562	12/22/2003	Renuga Gopal	NAA 0020 PA/41049.22	5054

7590 09/28/2005
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EXAMINER

DIXON, MERRICK L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/743,562	GOPAL ET AL.	
	Examiner	Art Unit	
	Merrick Dixon	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


MERRICK DIXON
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11-3-04;3-19-04</u> . | 6) <input type="checkbox"/> Other: _____ |

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Product by process claims are based on product itself eventhough such claims recite process steps and thus the products in such claims are unpatentable if they are the same as, or, obvious from, the product of the prior art, even if the prior product was made by different processes. In re Thorpe et al, 227 USPQ 964(1985); In re Marosi 218 USPQ 964(1985). See MPEP 706.03(e).

Claims 15 and 16 are product by process claims and are examined as such hereinafter.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusy et al(US 5869178).

The cited reference teaches the claimed product of a fiber reinforced orthodontic article- col 8, lines 40-41; col 3, lines 13-23; col 4, 40-46.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusy et al(US 5869178) in view of Hillerich III et al(US 5904803).

The cited primary reference teaches the basic claimed process including drawing fiber and resin material through a mold device and curing the fiber/resin material- col 1, lines 49-63; col 3, lines 1-67; col 4, 112-19. although the primary reference teaches spreading/movable mold parts (figs 1 & 2), the secondary reference more clearly show

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that it is known in the art to employ collapsible molding device to mold mixtures/composites as taught by the primary reference-figs 6 and 7; col 2, lines 60-67; see entire reference. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teachings of the secondary reference , and utilize such notorious devices during the primary reference's steps in the absence of unexpected results and motivated by process expedience(i.e., mold removal).

Concerning claims 2-5 and 8-14, the primary reference teaches orientating its device; impregnating the product;bending the device compressing, curing and pulling the fibers. col 1, lines 60-63;; col 3, lines 29-60;; col 5, lines 16-24; col 10, lines 1-11.

Concerning claim 6, the secondary reference heats its device to shrink it- see abstract; see entire reference.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weaver et al(US 4379802) is cited of interest to show the state of the art.

6.

Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 (November 15, 1989). **NOTE: All facsimiles sent to the examiner's**

personal fax number should be in draft-forms and will be treated as informal.

Same facsimiles will not be entered in the related applications unless otherwise agreed and noted by the examiner.

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The fax number for all other facsimile is 571-273-8300.

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Status inquiries for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays to Thursdays, between 12 noon and 8 PM, eastern time . The examiner's supervisor, Mrs. Rena Dye, can be reached at 571-272-3186.

A handwritten signature in black ink, appearing to read 'Merrick Dixon', with a long horizontal flourish extending to the right.

Merrick Dixon

Primary Examiner

Group 1700